

Definitions and Acronyms

Affected Water User (or AWU) (Env-Ws 1902.03) means a water user required to be registered under Env-Wr 700, or successor rules, and having a withdrawal or return location within 500 feet of a designated river or within 500 feet of a river or stream in its tributary drainage area.

Aggregate Water Use (Env-Ws 1902.04) means the total water use by all affected water users at, and upstream from, any location on a designated river, being the difference between the sum of water withdrawals and the sum of measured registered water returns. Aggregate Water Use is averaged for a month and may not represent withdrawal and return of water conditions during any one day.

cfs means cubic feet per second. One cfs is equal to 7.4814 gallons per second or 448.9 gallons per minute.

cfs/m means cubic feet per second of flow per square mile of stream drainage area. This is a means of comparing streamflow per unit area (square miles).

7Q10 means the lowest average flow rate for a 7-day period on an annual basis with an expected recurrence interval of once in every 10 years, determined for a location on a river or stream, and expressed in terms of volume per time period, usually in cfs.

Designated River means a river or river segment that is designated under RSA 483.

Discharge - A discharge is a return of water to the environment usually to the subsurface like a septic field or directly to a surface water body by a registered water user. Discharges have WUSD_ID (Water User Source or Discharge Identification Number) like 20057 20057-D01, where the first number (20057) represents the water user's identification number and the second, hyphenated number (20057-S02) represents the water user's discharge location. In this case D01 indicates the first or only discharge location of this facility. Water users may have more than one registered discharge.

Gage means a stream flow measurement station on a river. Stream gages used in this report are operated and maintained by US Geological Survey.

General Standard is a set of quantitative values for assessing aggregate water use at any river location relative to stream flow at that location. The General Standard has four tiers of water use that reflect the assumption that more water is available for use when stream flow is greater. Rivers that are not in compliance are not necessarily impaired or threatened due to flow alteration, but there is sufficient withdrawal relative to monthly mean streamflow to warrant concern and further analysis.

Env-Ws 1903.02 Estimation and Report of Aggregate Water Use and Streamflow.

(c) A designated river shall be not in compliance with the general standard if:

- (1) The average monthly aggregate water use exceeds 5 percent of 7Q10 when average monthly stream flow is less than or equal to 0.5 cfs/m;

- (2) The average monthly aggregate water use exceeds 0.02 cfs when average monthly stream flow is greater than 0.5 cfs and less than or equal to 1.0 cfs;
- (3) The average monthly aggregate water use exceeds 0.04 cfs when average monthly stream flow is greater than 1.0 cfs and less than or equal to 4 cfs; or
- (4) The average monthly aggregate water use exceeds 0.16 cfs when average monthly stream flow is greater than 4 cfs.

Impact Point Use means the incremental water use at a single point on a Designated River. An impact point is a location on the Designated River. It is the point where water use first affects the Designated River. An impact point may be a single surface water withdrawal from the Designated River, the point where groundwater would enter the Designated River if it had not been captured by a well, or the confluence of a tributary where water is being used with the Designated River. Impact Point Use where a tributary enters the Designated River may include water use from several water user sources or withdrawals, and is equal to the sum of these uses.

Protected Instream Flows means flow requirements for a Designated River established by the Commissioner of NH DES based on an Instream Flow Study conducted under Env-Ws1900 as required by RSA 483 and Laws of 2002, Chapter 278.

Registered water users – Under Env-Wr 700 water users using more than 140,000 gallons per week during any year are required to register with the Department and to report monthly water use.

Return means the release of water to the environment, as defined in Env-Wr 101.36. The Instream Flow Rules require that returns assessed in this report be registered (under Env-Wr 700 or successor rules) and measured.

Source – A source is a withdrawal location usually from a well or surface water body. Sources have WUSD_ID (Water User Source or Discharge Identification Number) like 20057 20057-S02, where the first number (20057) represents the water user's identification number and the second, hyphenated number (20057-S02) represents the water user's source of the withdrawal. In this case S02 indicates the second source of this facility. When the first and second numbers do not match, such as 20351 20061-S01, this indicates that water is transferred from the source of the water user identified by the second number to the water user identified by the first number as in the case of a municipal water system delivering water to an institution or factory. Water users may have more than one registered source.

Transfers – Registered water users with sources that are controlled by other registered water users, such as a public water supply, are considered transfers of water. These water users may in turn transfer water to another registered water user, such as a waste water treatment facility, or they may return the water themselves directly to the environment. Facilities that transfer water from or to AWUs are considered Affected Water Users. Because they may not have a physical location in the GIS coverage, some transfers may not be identified in this process.

WMPA (Water Management Planning Area) (Env-Ws 1902.16) means the tributary drainage area to a Designated River for which a Water Management Plan is required.

Withdrawal – removal of water from the environment by means of a well or surface water intake. The Instream Flow Rules require assessment of registered (under Env-Wr 700 or successor rules) withdrawals within 500 feet of a Designated River or on of its tributaries.